CMER Work Plan
SAGE Eastside Riparian Type F Program

Summary of Eastside Riparian Rules:

Intent of Rule

Provide stand conditions that vary over time within a range that meets functional conditions and maintains general forest health. Specified riparian functions include bank stability, wood recruitment, leaf litter fall, nutrients, sediment filtering, and shade. More specifically, the eastside rules were intended to create a range of riparian characteristics that a) fall within the range of historical variability, b) are sustainable or not at unnaturally high risk of catastrophic failure, and c) provide the functions that support the production of harvestable populations of salmonids. The eastside rules vary with elevation. The intent of the elevation bands was to capture the variations in historical disturbance regimes.

Summary of Rule Strategy

The eastside Type-F riparian rules utilize required riparian buffers designed to provide the specified functions and meet the intent of the rule. Riparian areas are divided into three zones, a core zone, an inner zone, and an outer zone. The width of the core zone is 30 feet. No harvest is allowed within this zone. This is intended to protect bank stability and maintain the trees that have the greatest influence on streamside shade and are highly likely to recruit to streams. The inner zone is defined as 45 feet for streams less than 15 feet in width and 70 feet for larger streams. The inner zone is managed to meet the specified intent and objectives of the rule. The width of the outer zone varies with site class and ranges from 0 to 55 feet. The sum of the core zone, inner zone and outer zone approximates the length of a site potential tree, which varies with site class.

Allowable harvest within the inner and outer zones is different for each of three elevation bands, referred to as habitat types in the rules. These elevation bands were intended to reflect variations in natural disturbance regimes. Several management strategies are allowed in the inner zone, with the intent that the combined core and inner zones will place the stands on a trajectory that meets the objectives of the eastside rules (see 1.0 above). The management strategies for high elevation stands are similar to those for the Westside, with the exception that the width of the various zones is different. Management within the various bands includes a preference for leaving species of trees that were the dominant species under natural disturbance regimes.

Strategy:

The eastside riparian strategy is designed to achieve three management objectives:

1) To create dynamic riparian stands and riparian processes that emulate those provided by natural riparian disturbance regimes,
2) To create healthy and sustainable riparian stand conditions and,
3) To create riparian stands that provides riparian functions necessary for the protection and recovery of salmon and aquatic amphibian species.

The Forest Practices Rules describe the management strategy as follows:

"For eastside forests, riparian management is intended to provide stand conditions that vary over time. It is designed to mimic eastside disturbance regimes within a range that meets functional conditions and maintains general forest health. These desired future conditions are a reference point on the pathway to restoration of riparian functions, not an end of riparian stand development" (WFPB,2001).

The Eastern Washington Type-F riparian rules are based on the following assumptions:

1) The management strategies in the Type-F rules will put stands in the RMZ on a trajectory that is within the range of natural variability.
2) The defined elevation bands are reasonably accurate reflections of the special distribution of historical disturbance regimes and species composition.
3) The management Strategies will minimize risk of catastrophic events
4) The management strategies will put stands on a trajectory that will provide riparian functions needed to support harvestable populations of fish.
5) The temperature overlays are necessary to provide stream temperatures that meet the state water quality standards and the needs for bull trout.

Uncertainties about the validity of the assumptions and the effectiveness of the rule lead to two critical questions and programs to address them. The critical questions for SAGE to address first are:

1) **What is the desired range of conditions for eastside riparian stands and what are the appropriate LWD performance targets?** This is titled *Eastside desired Future Range & Target Development Program* and the task type is listed as a Rule Tool.

2) **Can the shade/temperature relationships in the eastside temperature nomograph be refined?** It is titled *Eastside Temperature Nomograph Program* and also has Rule Tool task type.

To address these assumptions and critical questions, Sage has scoped and developed the following projects:

1. A **Disturbance Literature Review** has been undertaken to gain an understanding of what disturbance regimes existed in the past and how they affected riparian forests. This will help determine whether we can apply these past conditions to present riparian stands and meet the Desired Future Conditions for riparian function.

2. A **Large Woody Debris** L**iterature Review** is in progress to help gain an understanding of the dynamics of functional stream wood and to a lesser degree the linkage between the level of LWD recruitment and the health of aquatic habitat. Addressing the uncertainty will require additional information on the relationship of LWD recruitment and habitat function. There is uncertainty about the response to aquatic habitat to different types or levels of LWD input and loading, and consequently on how much LWD riparian buffers need to produce.

3. **Temperature Nomograph:** Develop an Eastern Washington specific nomograph using existing data and identify gaps for future study. This will identify site characteristic necessary to produce a better predictive model of stream temperatures in eastern Washington.

4. **Eastside Riparian Assessment Project:** Eastern Washington has a wide range of climactic conditions, elevations, forest types, riparian zones, and management history. Riparian health/function information over this range of conditions is limited. An evaluation, or baseline study, of current riparian forest stands is needed to determine whether they are meeting required functions for fish habitat and where they fit into the historical disturbance regime and/or current disturbance regime. This will also help to develop TARGETS to accomplish prescription assessment/evaluation.